From: **Thomas Steeger** To: Norman Spurling Robert Miller

Re: Fw: Bee incidents -first one from Jim Doan (May 22nd) Subject:

Date: 07/30/2012 01:38 PM

The residue data underscore the extent to which beekeeper perceptions of a potential cause may differ. The incident should be linked to the residues which were indicated in the recent analyses, i.e., phosmet and captan. The extent that the other pesticides detected should be linked to the incident report is uncertain.

Variation Variation Norman Spurling---07/30/2012 12:52:38 PM---Tom, This original bee kill report from Jim Doan forwarded to me on May 22, (now 1024270-001) origin

> From: Norman Spurling/DC/USEPA/US To: Thomas Steeger/DC/USEPA/US@EPA Cc: Robert Miller/DC/USEPA/US@EPA

Date: 07/30/2012 12:52 PM

Subject: Re: Fw: Bee incidents -first one from Jim Doan (May 22nd)

Tom.

This original bee kill report from Jim Doan forwarded to me on May 22, (now I024270-001) originally mentioned only glyphosate and Assail. Do you and Bob want those chemicals removed from the IDS, since the new email received today contained detects of 9 other chemicals? Norman Spurling 6(a)(2) Coordination and Analysis Team Leader OPP/ITRMD/ISB 703-305-5835

▼ Norman Spurling---05/23/2012 11:47:02 AM---Tom Zachos in the US EPA regional office in NY handles a lot of incidents but I'm not sure he is the

> From: Norman Spurling/DC/USEPA/US To: Thomas Steeger/DC/USEPA/US@EPA Cc: Robert Miller/DC/USEPA/US@EPA

Date: 05/23/2012 11:47 AM

Subject: Re: Fw: Bee incidents - Ohio too!

Tom Zachos in the US EPA regional office in NY handles a lot of incidents but I'm not sure he is the right person. Dr. Adrian Enache also has handled some incident reports in Region 2. Norman Spurling 6(a)(2) Coordination and Analysis Team Leader OPP/ITRMD/ISB 703-305-5835

▼ Thomas Steeger---05/22/2012 07:37:33 PM---Beekill incident in New York. Do you know who the correct contact is for this EPA Region?

From: Thomas Steeger/DC/USEPA/US
To: Norman Spurling/DC/USEPA/US@EPA

Date: 05/22/2012 07:37 PM

Subject: Fw: Bee incidents - Ohio too!

Beekill incident in New York.

Do you know who the correct contact is for this EPA Region?

----- Forwarded by Thomas Steeger/DC/USEPA/US on 05/22/2012 07:36 PM -----

From: Thomas Steeger/DC/USEPA/US
To: <jdoan@rochester.rr.com>
Date: 05/22/2012 07:36 PM

Subject: Re: Bee incidents - Ohio too!

Dear Mr. Jim Doan,

Once again thank you for your willingness to speak with me today. As I indicated over the phone, the information which you provided will be entered into the EPA Office of Pesticide Programs' (OPP) Incident Data System (IDS) and into the Ecological Incident Information System (EIIS) which is maintained by the Division in which I work, *i.e.*, the Environmental Fate and Effects Division. Risk assessors within OPP make use of these databases as a line of evidence in determining the potential effects of pesticides; these data are very useful toward understanding how chemicals may impact the environment under actual use conditions.

I am providing a summary of what we discussed relative to your recent beekill. I request that you review the information and let me know if there are any inaccuracies or whether you have any additional information. Based on our discussion, you indicated that on May 11, 2012, you observed bees dying in 48 colonies which had recently been retrieved from an orchard near Geneva, New York. The affected colonies had lost a large percentage of their forage force leaving roughly 5 - 6 frames of bees; however, there were insufficient bees to cover brood and brood were starting dying as well (evidenced by spotty brood pattern and dead brood being carried out of the colony by workers). Larvae in the colony appeared similar to American foulbrood; however the colony did not have foulbrood. The colonies did contain honey stores within the supers; however, because of the loss of forage bees, the ability of the colonies to produce an additional honey crop in the near future has been eliminated.

You have a total of 1600 colonies, but only 48, *i.e.*, those located in the orchard adjacent to where corn was planted, were affected. Other colonies appear to be doing very well.

The hives had been providing pollination services to a 50-acre orchard consisting of apple, apricot, and plum trees and by May 11, the last of the trees were completing bloom. The grower had not sprayed his trees with insecticides; however, you believed that it was possible that he had sprayed fungicides during the time that the bees were located in the orchard. Also, the understory of the orchard had been treated with glyphosate. The fields adjacent to the orchard had just been planted with corn beginning around May 7 when the weather warmed and the fields dried sufficiently to bring seeding equipment in. The field was planted with an air seeder.

You are still seeing bees dying. Both the New York Department of Environmental Contamination (DEC) and the Apiary Inspection Service had been contacted. Due to insufficient resources, the DEC was not able to send anyone out to investigate; however, the Apiary Inspection Service sent an inspector to collect samples for pesticide residue and disease/pest analysis. You indicated that the bees collected for residue analysis have been sent to Maryann Frazier at Pennsylvania State University. You do not know when the sample analysis will be completed.

You noted that the fields adjacent to where the affected colonies had been maintained had been subject to a chemical burn-down in preparation for seeding with corn. You do not know which chemicals were used in the process, but you suspect Round-up (glyphosate). You indicated that the orchard operator where your bees were positioned wanted to apply Assail (acetamiprid) and that is why you removed the colonies to your home yard; the operator had not applied the insecticide until you moved your colonies off site.

You provide both pollination services and honey production. Colonies have had relatively high Nosema spore load, but did not appear to be affected. You have been able to control varroa mite loads through the use of MiteAway strips (formic acid); however, you use a single strip per colony to avoid adverse effects to the queen. All of the colonies are queen-right.

You indicated that you have not seen a similar beekill since the late 80s when PennCap M was available. The apiary inspector also noted that he had not seen a similar beekill in some time.

Again, thank you for your willingness to provide information on

the recent beekill. If additional information becomes available, I would greatly appreciate if you would let me know.

Sincerely,

Tom Steeger

Thomas Steeger, Ph.D.
Senior Science Advisor
Environmental Fate and Effects Division
U. S. Environmental Protection Agency (MC 7507P)
Ariel Rios Building
1200 Pennsylvania Ave., NW
Washington DC 20460
(703) 305-5444 (Office)
(703) 305-6019 (FAX)

▼ ---05/22/2012 10:52:24 AM---CAN CALL ANY TIME AT 585 732 5370 OR AT HOUSE PHONE ---- Thomas Steeger < Steeger.Thom

From: <jdoan@rochester.rr.com>
To: Thomas Steeger/DC/USEPA/US@EPA

Date: 05/22/2012 10:52 AM

Subject: Re: Bee incidents - Ohio too!

> >

> I reported a bee kill to our NYS DEC. It was as bad a kill as I have seen in 20 years depopulating the hives back to nuc size from 100000 bee hives before kill. They would not come out unless they could fine someone! Unable too because kill had happened at least a week before. Our bee inspection service did come and get samples. Jim Doan

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